

Managing Rabies Exposures for Dogs, Cats, and Ferrets

NC Department of Health and Human Services
Division of Public Health
Communicable Disease Branch
919-733-3419

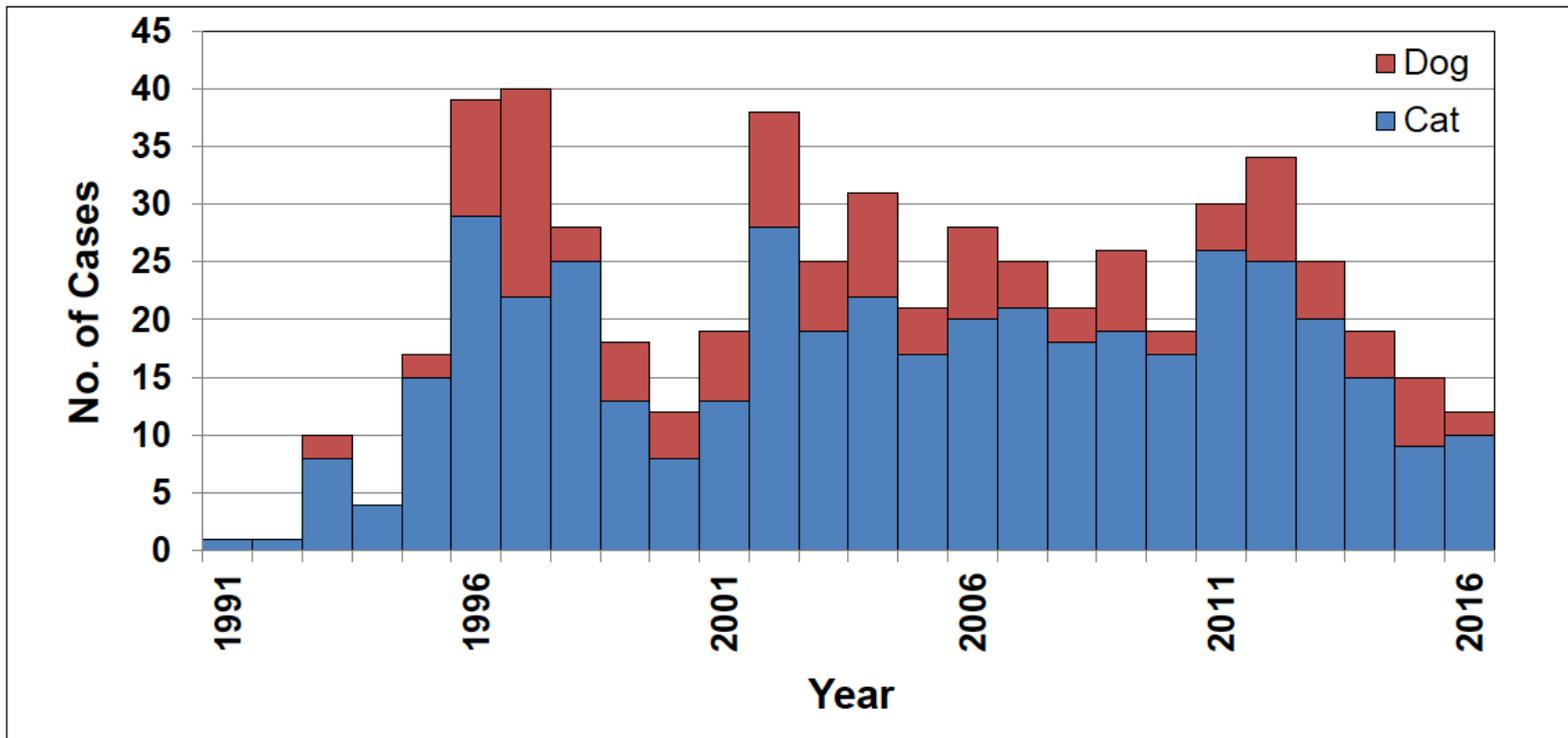


Overview

- General Rabies Epidemiology
- Legal Overview
- NCGS 130A-197

Rabies Surveillance

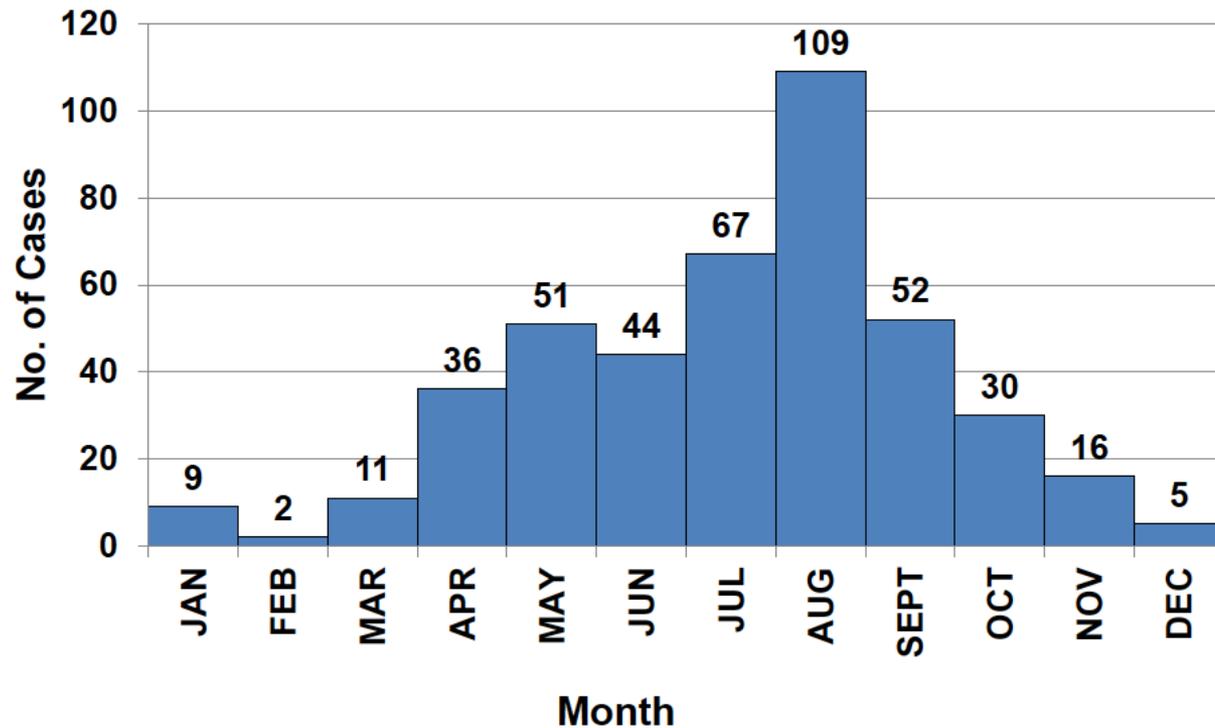
*Rabies Positive Dogs and Cats,
North Carolina, 1991 – 2016 (n = 558)*



NC State Laboratory of Public Health
Data Accessed APR 2017

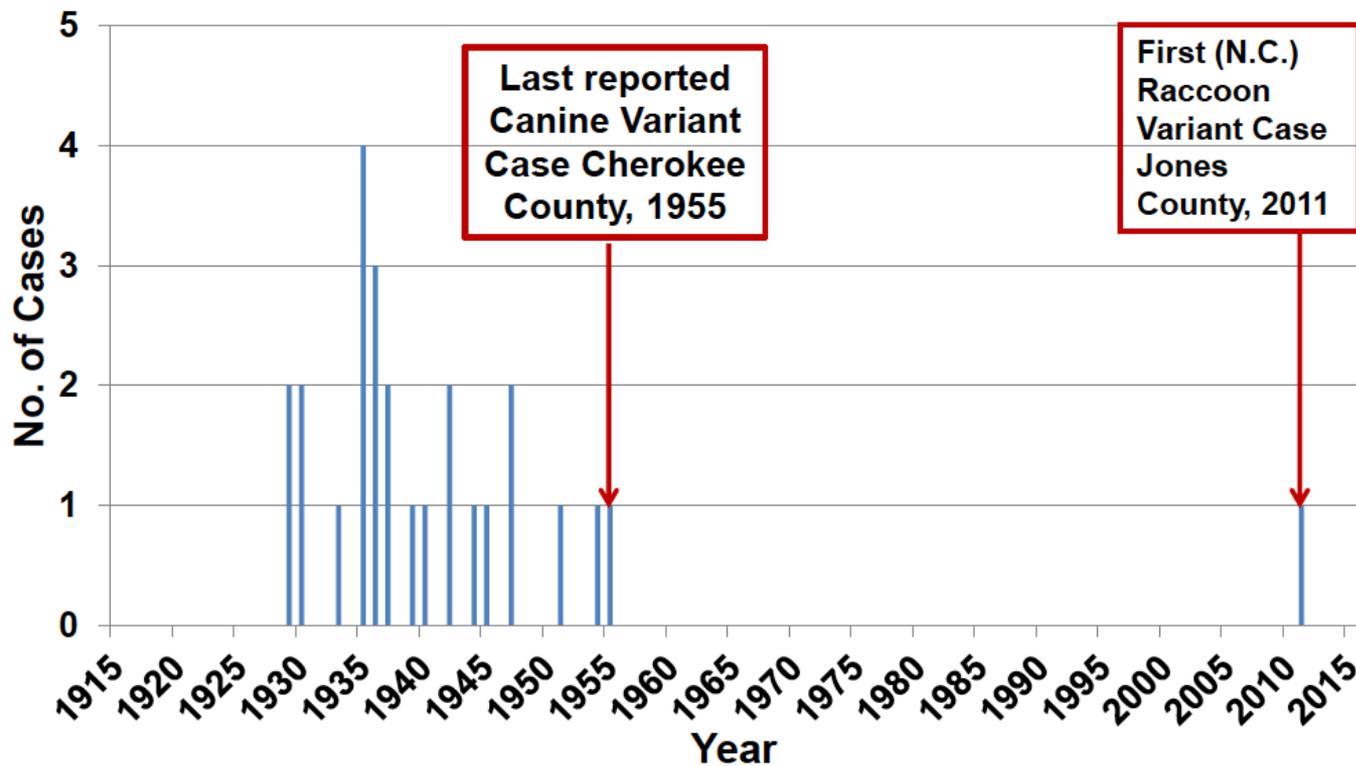
Rabies Surveillance

Rabies: Number of Positive Bats by Month, North Carolina, 2002 - 2016 (n = 432)



Rabies Surveillance

*Human Rabies Reported Cases
North Carolina, 1929 - 2016 (n = 26)*



NC Department of Health and Human Resources
Reported Communicable Diseases, Data Accessed APR 2017



What's New ?

JAVMA_{news}

March 01, 2016

New guidance for pets exposed to rabies

Cats and dogs overdue for a vaccine can have a booster shot

By Katie Burns

Posted Feb. 10, 2016

New guidance in this issue of the *JAVMA* advises that cats and dogs that are exposed to rabies and are overdue for a vaccine can have a booster shot followed by an observation period rather than be subject to quarantine or euthanasia.

The recommendation appears in the 2016 edition of the [Compendium of Animal Rabies Prevention and Control](#) (*J Am Vet Med Assoc* 2016;248:505-517) from the National Association of State Public Health Veterinarians, along with other updates from the 2011 edition. Dr. Catherine M. Brown, co-chair of the compendium committee, described the compendium as a series of best practices that jurisdictions can choose to follow.

The update pertaining to out-of-date vaccination status follows publication in the Jan. 15, 2015, issue of *JAVMA* of a report on ["Comparison of anamnestic responses to rabies vaccination in dogs and cats with current and out-of-date vaccination status"](#) (*J Am Vet Med Assoc* 2015;246:205-211). According to the abstract, "Results indicated that dogs with out-of-date vaccination status were not inferior in their antibody response following booster rabies vaccination, compared with dogs with current vaccination status."

NCGA Amended NCGS 130A-197

2017 Session

- SB 74 ratified by NC General Assembly, signed by Governor July 12, 2017
- Amended 130A-197 by implementing the recommendations and guidelines of the Compendium of Animal Rabies Prevention and Control, specifically for management of dogs, cats, and ferrets exposed to rabies

Amended NCGS 130A-197

- Effective October 1, 2017
- Mostly less restrictive
- Potentially fewer dogs and cats euthanized.
- More *never vaccinated* dogs and cats placed under quarantine (instead of euthanized) for a shorter period of time (4 months).

The New Control Measures



Four Vaccination Categories

Currently Vaccinated

Overdue with Documentation

Overdue without Documentation

Never Vaccinated

Currently Vaccinated

- Veterinary medical care for assessment, wound cleansing, and booster vaccination.
 - Immediate or within 96 hours
- The animal should be kept under the owner's control and observed for 45 days

The Rabies Certificate is not expired. If the animal's initial Rabies vaccination, it occurred at least 28 days prior to the exposure and at ≥ 3 months of age Or per Vaccine Manufacturer's label

Owner Observation 45 Days

- Under the owner's strict control and observation for 45 days until the LHD officially releases the 45 day observation period
- No contact with animals or people other than the designated owner/caretaker(s)
 - Leash walk, direct supervision secure fenced yard
 - Unless prior approval from LHD,
 - No travel in or out of state
 - No boarding
 - No outings to doggie park or other parks
 - No public venues, etc.
- Notify LHD immediately of illness or behavior change or bites to people; need for veterinary care

Overdue with Documentation

- Veterinary medical care for assessment, wound cleansing, and booster vaccination.
 - Immediate or within 96 hours
- The animal should be kept under the owner's control and observed for 45 days

Rabies Certificate is expired, but animal has received at least one rabies vaccine in its lifetime. If a single vaccine, the animal was vaccinated at ≥ 3 months of age

Overdue with Documentation

- What constitutes documentation
- Rabies Certificate
 - Model NASPHV form #51, OR
 - Official Veterinary Record (with same information as NASPHV form #51)

Overdue with Documentation

- What if the 96 hour booster window is missed?
- If booster vaccination is delayed, public health officials may consider increasing the observation period for the animal, taking into consideration factors such as the severity of exposure, the length of delay in booster vaccination, current health status, and local rabies epidemiology.

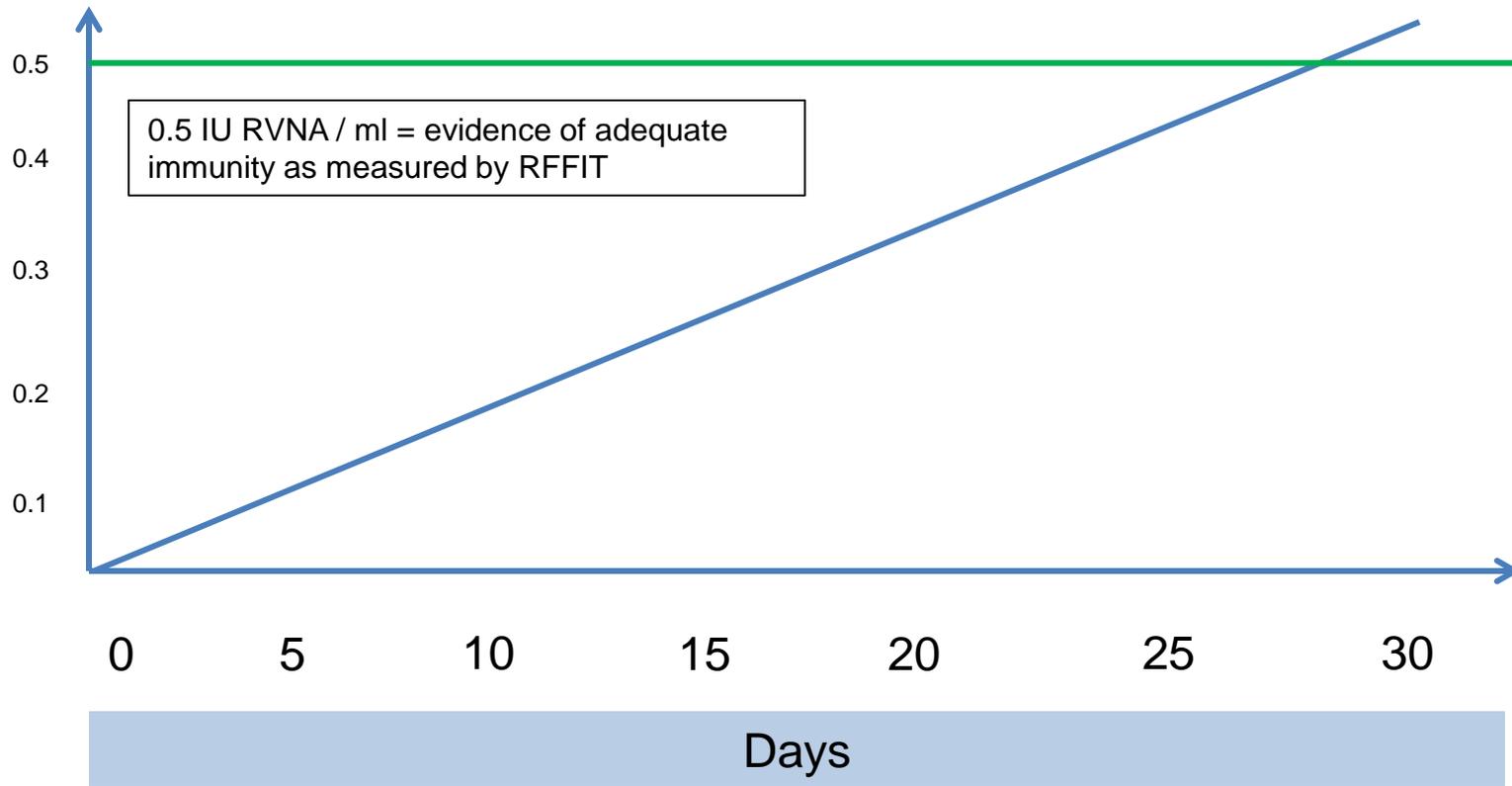
Overdue without Documentation

- Euthanize Immediately or, If owner unwilling to euthanize...
- Strict Quarantine –
 - Immediate Veterinary Care
 - Consult with LHD
 - Rabies Booster: on day of exposure but not more than four days (96 Hours) after exposure
 - Dogs and Cats – Four Months
 - Ferrets – Six Months
- Prospective Serologic Monitoring

Indications for Prospective Serologic Monitoring

- Evidence the animal has...
 - Microchip
 - Tattoo
 - Rabies Tag
 - Shelter papers
 - Evidence of Spay or Neuter
 - Ear-tipped Cat
- Owner provides strong anecdotal evidence of animal's prior rabies vaccination.

Overdue without Documentation – Prospective Serologic Monitoring

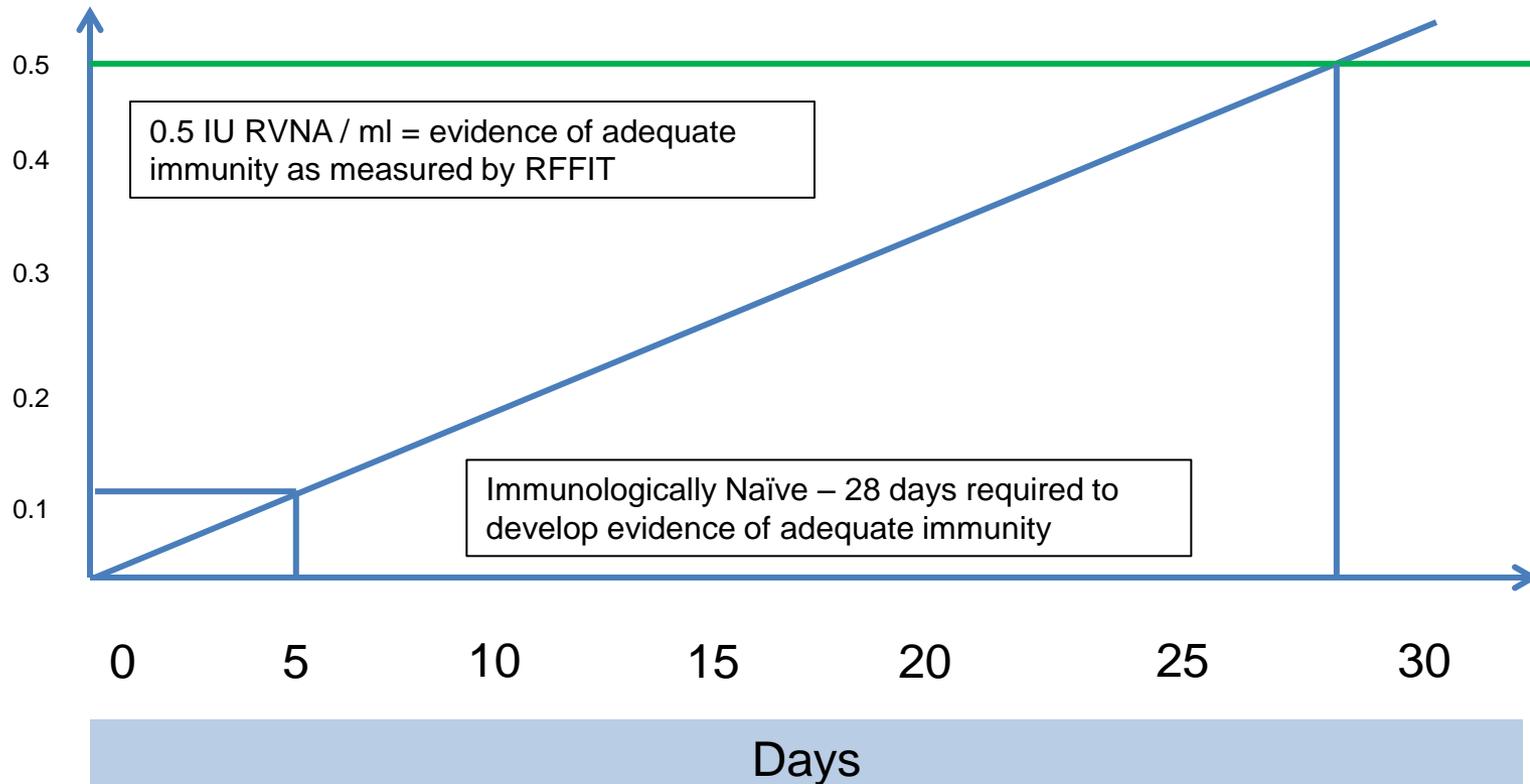


Serum Draw; 0 & 5

Administer Vaccine; 0

RVNA – rabies virus neutralizing antibody
RFFIT – rapid fluorescent focus inhibition test

Overdue without Documentation – Prospective Serologic Monitoring



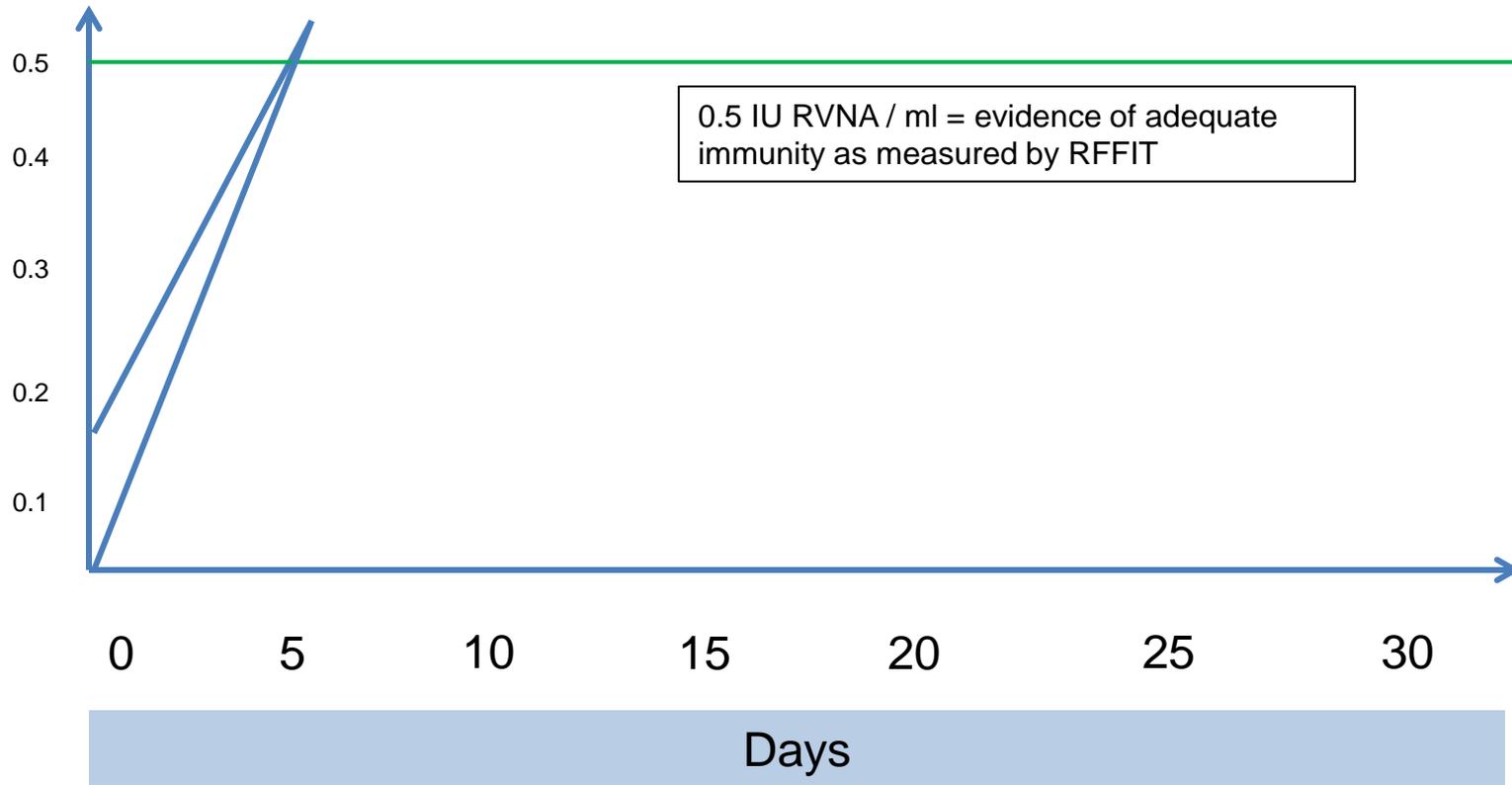
Serum Draw; 0 & 5

Administer Vaccine; 0

RVNA – rabies virus neutralizing antibody
RFFIT – rapid fluorescent focus inhibition test

This immune response indicates no prior exposure to rabies antigen → 4 month quarantine or euthanasia

Overdue without Documentation – Prospective Serologic Monitoring

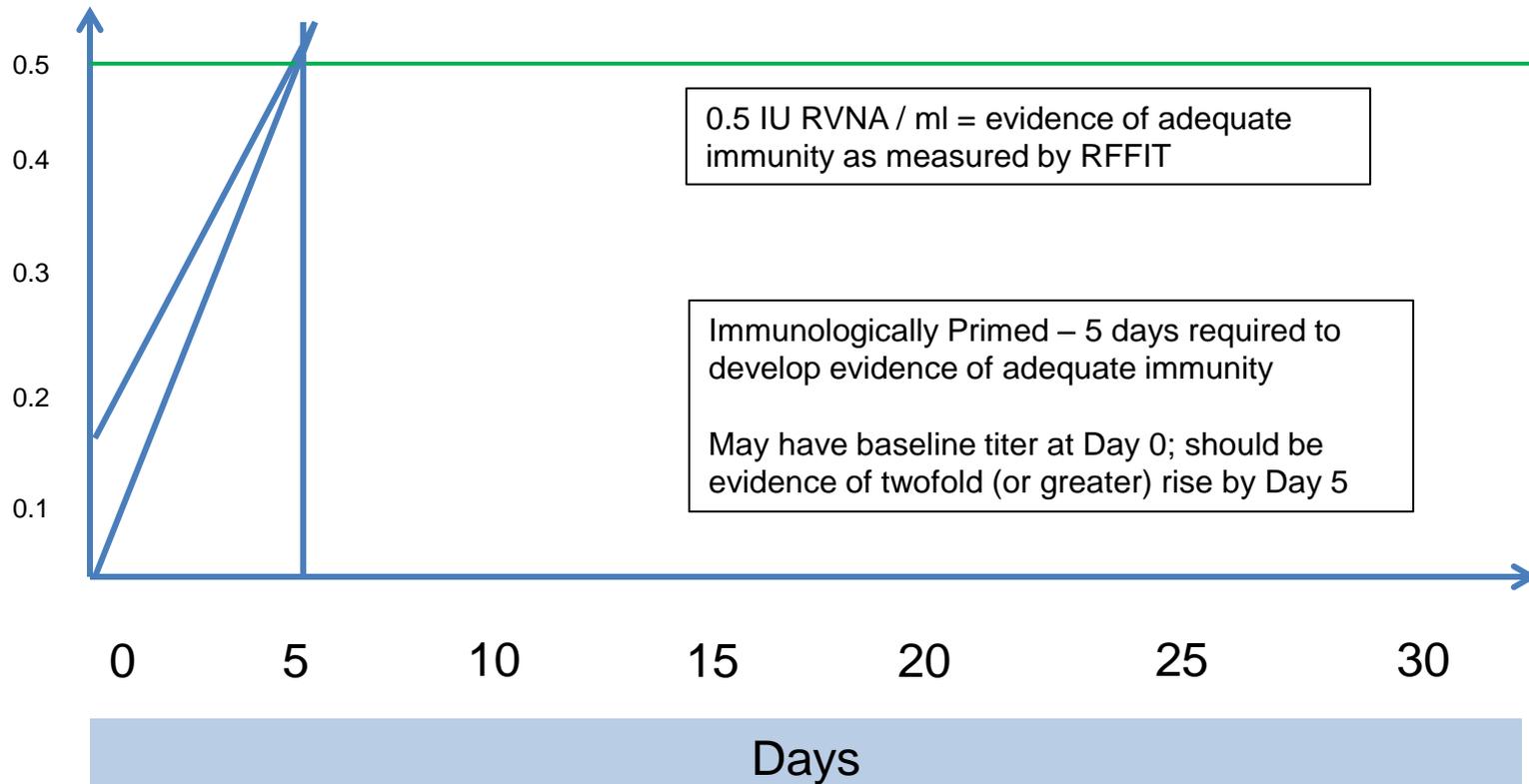


Serum Draw; 0 & 5

Administer Vaccine; 0

RVNA – rabies virus neutralizing antibody
RFFIT – rapid fluorescent focus inhibition test

Overdue without Documentation – Prospective Serologic Monitoring



0.5 IU RVNA / ml = evidence of adequate immunity as measured by RFFIT

Immunologically Primed – 5 days required to develop evidence of adequate immunity

May have baseline titer at Day 0; should be evidence of twofold (or greater) rise by Day 5

Serum Draw; 0 & 5

Administer Vaccine; 0

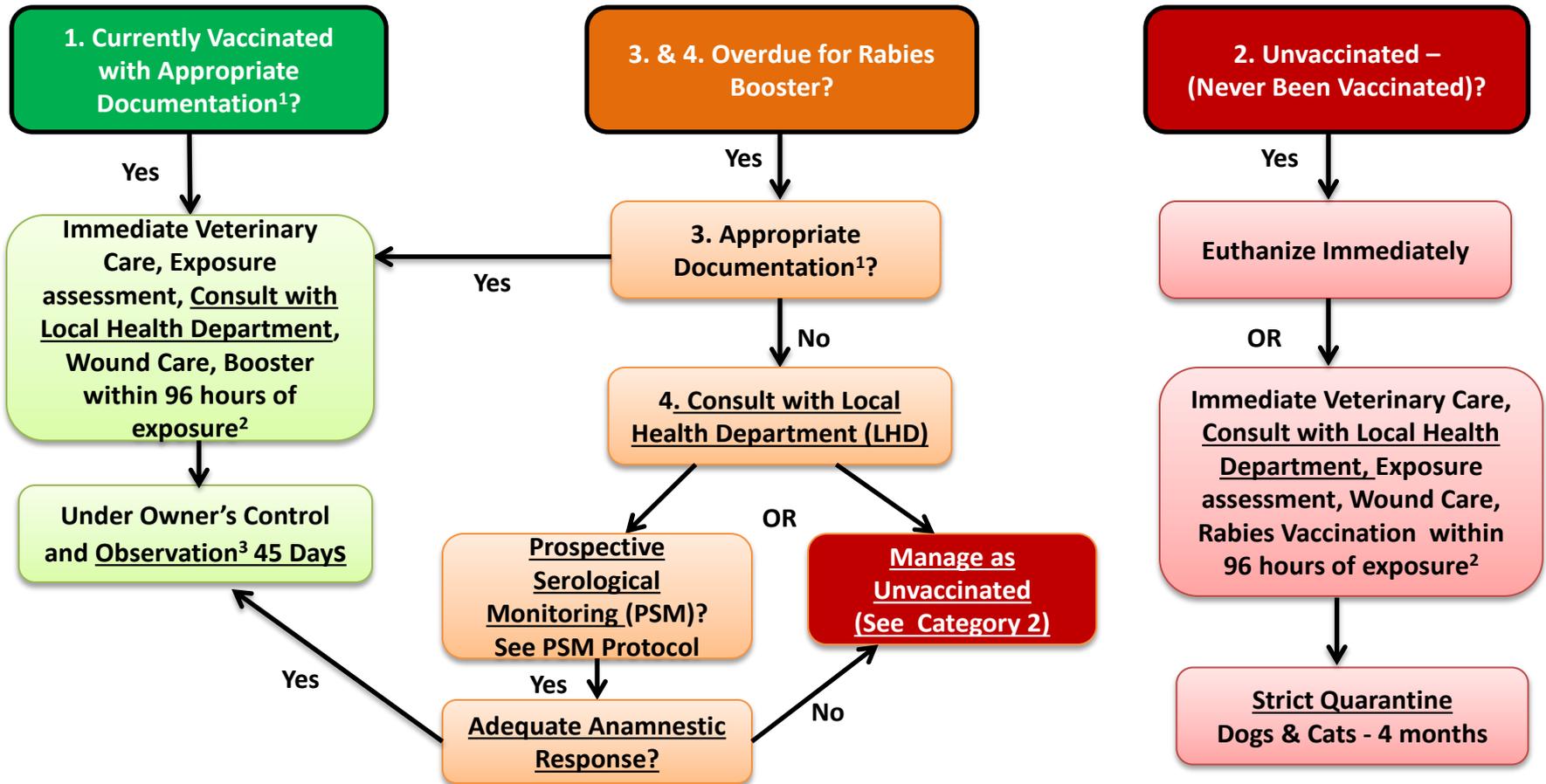
RVNA – rabies virus neutralizing antibody
RFFIT – rapid fluorescent focus inhibition test

This immune response indicates prior exposure to rabies antigen → release for 45 day home observation

Never Vaccinated

- Euthanize Immediately or, If owner unwilling to euthanize...
- Strict Quarantine –
 - Immediate Veterinary Care
 - Consult with LHD
 - Rabies Booster: on day of exposure but not more than four days (96 Hours) after exposure
 - Dogs and Cats – Four Months
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2016 NASPHV Rabies Compendium Postexposure Management Control Measures For Dogs and Cats by Rabies Vaccination Status

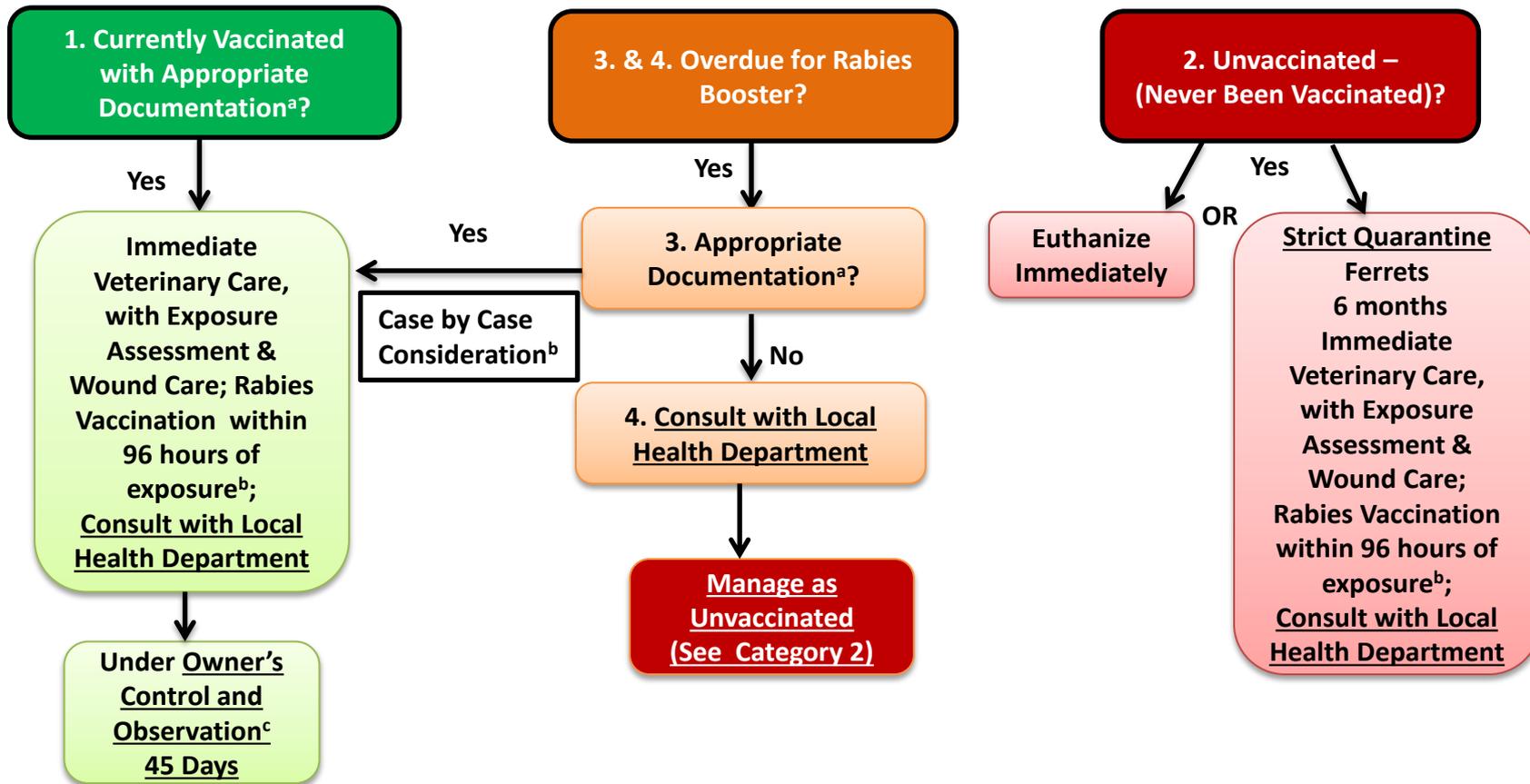


1. Appropriate documentation: A rabies certificate or official veterinary record validating that the animal has received a USDA-licensed rabies vaccine at least once previously, and if a single vaccination, the animal was vaccinated at least 28 days prior to the exposure date (NCGS 130A-185 and 130A-197).

2. If rabies booster or vaccination is delayed, LHD may consider increasing observation period (case-by-case) or quarantine period (from 4 to 6 months), considering severity of exposure, length of delay in vaccination, current health status, & number of prior rabies vaccines and lapses

3. Owner Observation: Under the owner's strict supervision and control (leash walk, fenced yard, no travel or boarding unless approved by the LHD, no outings at doggie park or other parks, etc.). There should be no contact with animals or people other than the caretaker(s) until the local health director has released the animal from the 45 day observation period.

2016 NASPHV Rabies Compendium Postexposure Management Control Measures For Ferrets by Rabies Vaccination Status Category



a. Appropriate documentation: A rabies certificate or official veterinary record validating that the animal has received a USDA-licensed rabies vaccine at least once previously, and if a single vaccination, the animal was vaccinated at least 28 days prior to the exposure date (NCGS 130A-185 and 130A-197).

b. If rabies booster or vaccination is delayed, LHD may consider increasing observation period (case-by-case). Consider severity of exposure, length of delay in vaccination, current health status, & number of prior rabies vaccines and lapses

c. Owner Observation: Under the owner's strict supervision and control (leash walk, fenced yard, no travel or boarding unless approved by the LHD, no outings at doggie park or other parks, etc.). There should be no contact with animals or people other than the caretaker(s) until the local health director has released the animal from the 45 day observation period.

October 14, 2016

Management of Overdue Ferrets

- LHD will Evaluate on a case-by-case basis to determine need for euthanasia or immediate booster vaccination followed by observation or strict quarantine
- Consider
 - severity of exposure (dose: # and location of bites)
 - time elapsed since last vaccination
 - number of previous vaccinations
 - current health status

Postexposure Management:

Illness or Death in exposed animal

- Any illness or death in an exposed animal shall be reported immediately to the local health department and animal control.
- If the exposed animal dies for any reason or develops signs suggestive of rabies (the animal shall be euthanized), the head or entire brain (including brainstem) shall be submitted to NCSLPH for testing.
- § 130A-198 and § 130A-199 - Immediately notifiable

Questions?

